

Notice of Allowability

Application No.

09/641,591

Examiner

Thomas H. Stevens

Applicant(s)

ROSEDALE, PHILIP

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendments filed 02/27/06 & 5/23/06.
2. ☒ The allowed claim(s) is/are 1-58.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>5/23/06</u> . |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>2/27/06</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

1. Claims 1-54 were examined.
2. Claims 55-58 were added.
3. Claims 1-58 were examined.

Allowable Subject Matter

Examiner's Amendment

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Burt Magen (Reg.No. 37,175), on, 5/21/06:

Specification, pg. 3, line 30, after the word "user" insert element number -- 105 --.

Notice of Allowance

5. Claims 1-58 are allowed.
6. The following is an examiner's statement of reasons for allowance:

While US Patent 5,734,373 teaches (claim 1) an input system for use with a simulation environment comprising: a sensory feedback device which provides a sensation to the user corresponding to motion which occurs in the simulated environment; (claim 6) a method for providing feedback to a user of a processing unit, comprising the steps of: sending signals from the processing unit to the vibrating devices to cause the vibrating

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devices to vibrate; (claim 10) an input system for a user comprising and a processing unit which sends signals to the vibrating devices to control the operation of the vibrating devices, processing unit controlling the signals to cause the vibrating devices located adjacent to a particular muscle to provide feedback indicating that the restricted portion of the user's body is moving; (claim 15) providing sensory feedback which is a reflection of the intended motion; (claim 23) an input system for use with a simulator, comprising: an output system, further comprising sensors to detect a force exerted by the user and the processing unit calculating the effect of the force applied by the user in a simulated environment and presenting this effect in the simulated environment to the user via the output system; (claim 45) an input system for use with a computer comprising of sensors and vibration devices, the sensors being configured to detect forces exerted by the user, the sensors sending signals representing the magnitude and direction of these forces to the computer, and the vibration devices; (claim 52) a method for a user to control an environment simulated on a computer system where the user is modeled within the simulated environment, comprising: sending a signal representing these forces to the computer system; and determining the effect that these forces have upon the model of the user in the environment simulated by the computer; (claim 55) an input system for use with a simulated environment, none of these references, taken either alone or in combination, with the prior art of record disclose

(claim 1) "an immobilizing device which restricts motion of a portion of a user's body; sensors which detect forces applied by the restricted portion of the user's body,"

(claim 6) "providing an immobilizing device which holds a portion of the user's body immobile; providing vibrating devices disposed upon the immobilizing device and positioned to touch the immobilized portion of the user's body near muscles which would extend if the immobilized portion of the use's body moved; and controlling these signals to cause the vibrating devices located near a particular muscle to provide feedback indicating that the immobilized portion of the user's body is moving,"

(claim 10) "an immobilizing device which restricts motion of a portion of the user's body; a vibrating device disposed substantially adjacent to a nerve spindle of a muscle of the user's body which extends when the restricted portion of the user's body moves;

(claim 15) "a method for providing an indication to a user that his body has moved when it has not comprising: preventing an intended motion of a portion of a user's body, wherein the portion of the user's body is substantially immobilized"

(claim 23) "immobilizing device; holding the head of the user in a substantially fixed position with to the user's torso...in an attempt to move the user's head,

(claim 45) "at least one immobilizing device which hold a portion of a body of a user of the system in a substantially fixed position, the immobilizing device; in attempting to move the portion of the body held by the immobilizing device, vibration devices disposed near the muscles of the user and controlled by the computer so as to provide sensations which mimic the sensations which would be felt if the attempted motion had occurred"

(claim 52) " providing at least one immobilizing device which restricts motion of at least a portion of the user's body; detecting the forces exerted by the immobilized portion of the user's body against the immobilizing device;

(claim 55) "an immobilizing device which hold a portion of a user's body in a substantially fixed position; an output device which provides a sensation to the user corresponding to motion that occurs in the environment, the motion is related to the detected forces"

in combination with the remaining elements and features of the claimed invention. It is for these reasons that the applicants' invention defines over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".


Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715, Monday-Friday (8:00 am- 4:30 pm EST).

If attempts to reach the examiner by telephone are unsuccessful, please contact examiner's supervisor Mr. Paul Rodriguez 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Answers to questions regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) (toll-free (866-217-9197)).

May 19, 2006


Anthony Knight
Supervisory Patent Examiner
Group 3600

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